

imVision® Power over Ethernet (PoE) features

Standards-based approach for monitoring PoE distribution over structured cabling

Cabling standards in TIA, ISO/IEC and CENELEC establish recommended bundle sizes based on environment and cable categories. The Addendum 1 of the ISO/IEC 18598 (AIM Standard) addresses the need to document cable bundle sizes as well as the power levels of each cable in the bundle. An automated infrastructure management (AIM) system such as CommScope's imVision® solution can automate such recordkeeping to ensure standards-compliant designs are documented. It does this by correlating the real-time switch power usage per port with cable bundle size and cable type.

The number of cables in a bundle is a static number; however, the status of cabling related to PoE and data delivery changes due to the dynamic nature of connectivity between switch and panel ports.

Whenever connectivity changes are made, imVision automatically updates the cable status within a cable bundle, thus providing a real-time view of every cable bundle's PoE state.

Most of the guidelines in cabling standards define a maximum cable bundle size based on the most demanding scenario of having all cables in a bundle delivering PoE Class 8 current (90 watts), as defined by the IEEE 802.3bt standard.

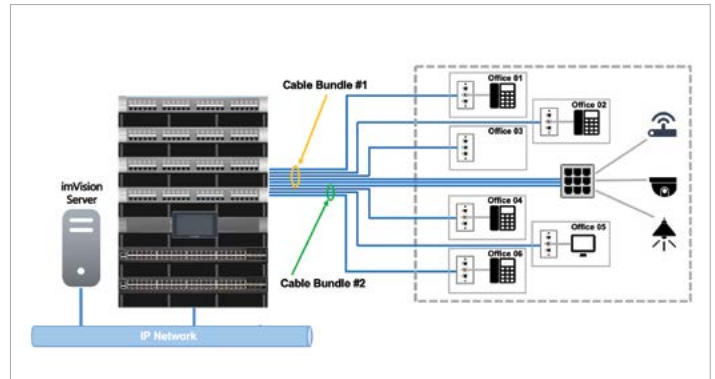
However, in practice, not every cable in a bundle could be energized—or, if it is energized, it may not be to the level of PoE Class 8 current.

Because imVision automatically monitors the PoE state of each cable within a bundle in real time, bundle sizes do not have to be constrained by the maximum size per the guidelines. Instead, imVision provides the flexibility to use whatever bundle size is suitable for that installation.

imVision's advantages in PoE monitoring, recording and documentation become increasingly important as both the number and types of PoE-enabled devices in the enterprise continue to increase. Several factors are driving this, including:

- 4PPoE standard (IEEE P802.3bt), delivering up to 90 watts to end devices
- Convergence of IT and facilities onto a common IP/Ethernet platform
- The internet of things (IoT) and its ever-growing ecosystem of connected devices

imVision provides unique standards-based management of cable bundle sizes, which has become increasingly important as higher power PoE standards have been developed.



imVision PoE features:

- PoE utilization monitoring per switch/port (PSE)
- Ability to include PoE type for service provisioning
- Location tracking of PoE Class of PoE-capable devices (PD)
- The ability to locate outlets that are connected to PoE-capable switch ports
- Automatic documentation of cable bundles
- Recording number of cables per bundle
- Recording number of cables in a bundle that are powered
- Recording power levels for cables in a bundle